STATE OF INDIANA

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

PUBLIC NOTICE NO. 2023-05-IN0002259- RD
DATE OF NOTICE: MAY 12, 2023
RESPONSE DUE DATE: JUNE 12, 2023

The IDEM Office of Water Quality proposes the following NPDES DRAFT PERMIT:

MAJOR - Modification

Southern Indiana Gas & Electric Company (SIGECO) d/b/a CenterPoint Energy Indiana South (CEIS) - F.B. Culley Generating Station, NPDES Permit No. IN0002259, located at 3711 Darlington Rd, Newburgh, IN (WARRICK COUNTY). This major industrial facility is a coal-fired steam electric generating plant with two (2) generating units; Unit 2 (100 MW) and Unit 3 (270 MW). SIGECO is permitted to discharge an average daily flow volume of 182 million gallons to the Ohio River. The permittee is requesting permit language modifications for activities and changes related to the re-routing of several wastestreams which will eliminate one of the seven (7) current permitted outfalls/monitoring locations:

Outfall 001	Latitude	37º 54' 35.39" N,	Longitude	-87º 19' 37.99"
Outfall 101	Latitude	37º 54' 44.36" N,	Longitude	-87º 19' 50.81"
Outfall 201	Latitude	37º 54' 34.49" N,	Longitude	-87º 19' 27.59"
Outfall 301	This outfall is being removed as part of this permit modification.			
Outfall 401	Latitude	37º 54' 34.78" N,	Longitude	-87º 19' 28.98"
Outfall 004	Latitude	37º 54' 38.36" N,	Longitude	-87º 19' 35.09"
Outfall 005	Latitude	37º 54' 42.40"N,	Longitude	-87º 19' 51.49"

Permit Manager: Nicole Gardner, (317) 232-8707 or via email at Ngardner@idem.IN.gov.
Posted online at https://www.in.gov/idem/public-notices/.

PROCEDURES TO FILE A RESPONSE

You are hereby notified of the availability of a 30-day public comment period regarding the referenced draft NPDES permit, in accordance with 327 IAC 5-3-9. The NPDES application and draft permit documents are available for inspection at IDEM, Office of Water Quality, Indiana Government Center North - Room 1255, 100 N. Senate Ave, Indianapolis, IN 46204 from 9:00 a.m. until 4:00 p.m., Monday thru Friday, (copies 10¢ per page). The Draft Permit is posted online on the above-referenced IDEM public notice web page. A courtesy copy has also been sent via email to the local County Health Department. Please tell others whom you think would be interested in this matter. For more information about public participation including your rights & responsibilities, please see https://www.in.gov/idem/public-notices/. You may want to consult our online Citizens' Guide to IDEM: https://www.in.gov/idem/resources/citizens-guide-to-idem/.

Comments: The proposed decision to issue a permit is tentative. Interested persons are invited to submit written comments on the draft permit. All comments must be delivered to IDEM or postmarked no later than the Response Due Date noted to be considered in the decision to issue a final permit. Deliver or mail all requests or comments to the attention of the Permit Manager at the above address.

To Request a Public Hearing: Any person may request a public hearing. A written request must be submitted to the above address on or before the Response Due Date. The written request shall include: the name and address of the person making the request, the interest of the person making the request, persons represented by the person making the request, the reason for the request and the issues proposed for consideration at the hearing. The Department will determine whether to hold a public hearing based upon the comments and the rationale for the request. Public Notice of such a hearing will be circulated in at least one newspaper in the geographical area of the discharge and to those persons submitting comments and/or on the mailing list at least 30 days prior to the hearing.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb
Governor

Brian C. Rockensuess
Commissioner

VIA ELECTRONIC MAIL

Mr. Wayne Games, VP Power Generation Operations
CenterPoint Energy
P.O. Box 209
Evansville, IN 47702

Dear Mr. Games:

Re: NPDES Permit No. IN0002259
Draft Permit Modification
SIGECO F.B. Culley Generating Station
Newburgh, IN – Warrick County

Your request for a permit modification has been reviewed and processed in accordance with rules adopted under 327 IAC 5. Enclosed is a copy of the draft permit modification.

Pursuant to IC 13-15-5-1, IDEM will publish the draft permit document online at https://www.in.gov/idem/public-notices/. Additional information on public participation can be found in the "Citizens' Guide to IDEM", available at https://www.in.gov/idem/resources/citizens-guide-to-idem/. A 30-day comment period is available to solicit input from interested parties, including the public.

Please review this draft permit modification and associated documents carefully to become familiar with the proposed terms and conditions. Comments concerning the draft permit modification should be submitted in accordance with the procedure outlined in the enclosed public notice form. We suggest that you meet with us to discuss major concerns or objections you may have with the draft permit modification.

Questions concerning this draft permit modification may be addressed to Nikki Gardner, at 317/232-8707 or ngardner@idem.in.gov.

Sincerely,

Richard Hamblin, Chief
Industrial NPDES Permits Section
Office of Water Quality

Enclosures
cc: Chief, Permits Section, U.S. EPA, Region 5
Warrick County Health Department
Angela Casbon-Scheller, Manager, Environmental Operations
Jeremy Ferguson, IDEM
Stacey Cochran, ORSANCO

STATE OF INDIANA

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

AMENDED AUTHORIZATION TO DISCHARGE UNDER THE

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 et seq., the "Clean Water Act" or “CWA”), and IDEM’s permitting authority under IC 13-15,

SOUTHERN INDIANA GAS AND ELECTRIC COMPANY (SIGECO)

is authorized to discharge from the F.B. Culley Generating Station, a coal-fired steam electric generating plant, that is located at 3711 Darlington Road, Newburgh, Indiana, to receiving waters identified as the Ohio River in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, and III hereof.

The permit, as issued on February 1, 2023, is hereby amended, as contained herein. The amended provisions shall become effective _____. All terms and conditions of the permit not modified at this time remain in effect. Further, any existing condition or term affected by the amendments will remain in effect until the amended provisions become effective. This permit may be revoked for the nonpayment of applicable fees in accordance with IC 13-18-20.

This permit and the authorization to discharge, as amended, shall expire at midnight February 29, 2028. In order to receive authorization to discharge beyond the date of expiration, the permittee shall submit such information and forms as are required by the Indiana Department of Environmental Management no later than 180 days prior to the date of expiration.

Issued on _____ for the Indiana Department of Environmental Management.

Jerry Dittmer, Chief
Permits Branch
Office of Water Quality

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge from the outfall listed below in accordance with the terms and conditions of this permit. The permittee is authorized to discharge from Outfall 001[21], located at Latitude 37° 54' 35.39", Longitude -87° 19' 37.99". The discharge is limited to condenser cooling unit wastewater, contact stormwater pond discharge (internal Outfall 101), ash pond discharge (internal Outfall 201), bottom ash transport water filtrate (effective no later than May 1, 2023), and metal cleaning wastewater (internal outfall 401). Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to entry into the Ohio River. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1][2][12][13][16][17]
Outfall 001

Table 1

	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
Parameter	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
Flow[18]	Report	Report	MGD	----	----	----	1 X Daily	24-Hour Total
Plant Capacity Factor	----	----	----	Report	----	%daily average	1 X Daily	Report
Temperature								
Intake	----	----	----	Report	Report	°F	1 X Hourly[11]	Grab
Effluent[22]	----	----	----	Report	Report	°F	1 X Hourly[11]	Grab
Mixed River[9][10][22]	----	----	----	Report	Report	°F	1 X Daily[23]	Grab
ORSANCO[25]								
Interim	----	----	----	----	Report	°F	1 X Daily	Report
Final	----	----	----	----	110	°F	1 X Daily	Report
Total Residual Oxidants (Bromine)[5][6]			----	0.75	2	µg/l	1 X Daily	Grab
TRC-Continuous [5][6][14]	----	----	----	0.02	0.04	mg/l	1 X Daily	Grab
Duration/Day	----	----	----	----	120	minutes/day	1 X Daily	Report
TRC - Intermittent[15][19]		----	----	Report	0.2	mg/l	1 X Daily	Grab
Frequency	----	----	----	----	4	times/day	1 X Daily	Report
Dose Duration	----	----	----	----	40	minutes/dose	1 X Daily	Report
Duration/Day	----	----	----	----	120	minutes/day	1 X Daily	Report
Cadmium[4]	----	----	----	2.1	3.9	µg/l	2 X Monthly	24 Hr. Comp.
Mercury[4][6]	----	----	----	12	20	ng/l	6 X Annually[7]	Grab
Copper[4]	----	----	----	31	63	µg/l	2 X Monthly	24 Hr. Comp.
Iron[4]	----	----	----	Report	Report	µg/l	2 X Monthly	24 Hr. Comp.
Silver[4][6][24]								
Interim	----	----	----	Report	Report	µg/l	2 X Monthly	24 Hr. Comp.
Final	----	----	----	3.8	6.6	µg/l	2 X Monthly	24 Hr. Comp.
Nickel[4]	----	----	----	Report	Report	µg/l	1 X Monthly	24 Hr. Comp.
Aluminum[4]	----	----	----	Report	Report	mg/l	1 X Monthly	24 Hr. Comp.
Arsenic[4][6]	----	----	----	Report	Report	mg/l	1 X Monthly	24 Hr. Comp.
Selenium[4][6]	----	----	----	Report	Report	mg/l	1 X Monthly	24 Hr. Comp.
Zinc[4]	----	----	----	Report	Report	mg/l	1 X Monthly	24 Hr. Comp.
Free Cyanide[6]	----	----	----	Report	Report	mg/l	1 X Monthly	Grab
Sulfate	----	----	----	Report	Report	mg/l	1 X Quarterly[8]	24 Hr. Comp.

Boron	----	----	----	Report	Report	mg/l	1 X Quarterly[8] 24 Hr. Comp.
Chloride	----	----	----	Report	Report	mg/l	1 X Quarterly[8] 24 Hr. Comp.
Fluoride	----	----	----	Report	Report	mg/l	1 X Quarterly[8] 24 Hr. Comp.
Bromide	----	----	----	Report	Report	mg/l	1 X Quarterly[8] 24 Hr. Comp.
Whole Effluent Toxicity Testing[20]							

Table 2

	Quality or Concentration			Monitoring Requirements	
	Daily	Daily		Measurement	Sample
Parameter	Minimum	Maximum	Units	Frequency	Type
pH[3]	6.0	9.0	s.u.	1 X Monthly	Grab

[1] See Part I.B. of the permit for the minimum narrative limitations.

[2] In the event that a new water treatment additive is to be used that will contribute to this Outfall, or changes are to be made in the use of water treatment additives, including dosage, the permittee must apply for and receive approval from IDEM prior to such discharge. Discharges of any such additives must meet Indiana water quality standards. The permittee must apply for permission to use water treatment additives by completing and submitting State Form 50000 (Application for Approval to Use Water Treatment Additives) currently available at: https://www.in.gov/idem/forms/idem-agency-forms/.

[3] If the permittee collects more than one grab sample on a given day for pH, the values shall not be averaged for reporting daily maximums or daily minimums. The permittee must report the individual minimum and the individual maximum pH value of any sample during the month on the Monthly Monitoring Report form.

[4] The permittee shall measure and report the identified metal as total recoverable metal.

[5] The water quality-based effluent limits (WQBEL) for bromine and TRC are less than the limit of quantitation (LOQ) as specified in footnote [6]. Compliance with this permit will be demonstrated if the effluent concentrations measured are less than the respective LOQ. If the measured concentration of bromine or TRC is greater than the water quality-based effluent limitations and above the respective LOD specified in footnote [6] in any three (3) consecutive analyses, or any five (5) out of nine (9) analyses, then the discharger shall:

(1) Determine the source of the parameter through an evaluation of sampling techniques, analytical/laboratory procedures, and waste streams (including internal waste streams). Re-examine the chlorination /dechlorination procedures or re-examine the bromination /de-bromination procedures, as applicable.

(2) The sampling and analysis for bromine or TRC shall be increased to 2 X Daily and remain at this increased sampling frequency until:

(a) The increased sampling frequency for bromine or TRC has been in place for at least five (5) days;
(b) At least nine (9) samples have been taken under this increased sampling frequency; and
(c) The measured concentration of bromine or TRC is less than the LOD specified in footnote [6] in at least seven (7) out of the nine (9) most recent analyses.

[6] The following EPA approved test methods and associated LODs and LOQs are to be used in the analysis of the effluent samples. Alternative methods may be used if first approved by IDEM and EPA, if applicable.

Parameter	Test Method	LOD	LOQ
Mercury	1631E	0.2 ng/l	0.5 ng/l
Arsenic	3113 B-2004	1 µg/l	3.2 µg/l
Arsenic	200.9, Rev. 2.2 (1994)	0.5 µg/l	1.6 µg/l
Arsenic	200.8, Rev. 5.4 (1994)	0.4 µg/l	1.3 µg/l
Selenium	3113 B-2004 or 3114 B-2009	2 µg/l	6.4 µg/l
Selenium	200.8, Rev. 5.4 (1994)	2.1 µg/l	6.7 µg/l
Selenium	200.9, Rev. 2.2 (1994)	0.6 µg/l	1.9 µg/l
Silver	200.8, Rev 5.4 (1994) Selection Ion Monitoring	0.005 µg/l	0.016 µg/l
Chlorine, Total residual	4500-Cl D-2000, E-2000 or G-2000	0.02 mg/l	0.06 mg/l
Cyanide, Available**	4500-CN-G-1999	5 µg/l	16 µg/l
Cyanide, Available**	OIA-1677-09 (available)	0.5 µg/l	1.6 µg/l
Cyanide, Available**	Kelada-01 (available)	0.5 µg/l	1.6 µg/l
Oxidants, Total Residual (Bromine)	4500-Cl D-2000, E-2000 or G-2000	0.02 mg/l	0.06 mg/l
**Free cyanide shall be reported as free cyanide but measured using one of the EPA approved test methods above for available cyanide.			

Case-Specific LOD/LOQ

The permittee may determine and use a case-specific LOD or LOQ using the analytical method specified above, or any other analytical method which is approved by the Commissioner, and EPA if applicable, prior to use. The LOD shall be derived by the procedure specified for method detection limits contained in 40 CFR Part 136, Appendix B, and the LOQ shall be set equal to 3.18 times the LOD. Other methods may be used if first approved by the Commissioner.

[7] Mercury monitoring shall be conducted 6 X annually in the months of February, April, June, August, October, and December of each year for the term of the permit using EPA Test Method 1631, Revision E.

[8] Samples shall be taken once at any time during each of the four annual quarters:

(A) January-February-March;
(B) April-May-June;
(C) July-August-September; and
(D) October-November-December.

For quarterly monitoring, in the first quarter for example, the permittee may conduct sampling within the month of January, February or March. The result from this reporting timeframe shall be reported on the March DMR, regardless of which of the months within the quarter the sample was taken.

[9] At no time shall the water temperature of the discharge from Outfall 001, as determined at the edge of the mixing zone described in 327 IAC 2-1-4, exceed the maximum limits in the following table during more than one percent (1%) of the hours in the twelve (12) month period ending with any month and by more than three degrees Fahrenheit (3ºF) (one and seven-tenths degrees Celsius (1.7ºC)). Water temperatures shall not exceed the following average temperature limitations (these are averages of the daily maximums for each day in the period).

Month	Average °F(°C)	Maximum °F(°C)
January	49.3 (9.6)	50 (10.0)
February	48.6 (9.2)	50 (10.0)
March	55.0 (12.8)	60 (15.6)
April	63.2 (17.3)	70 (21.1)
May	71.4 (21.9)	80 (26.7)
June 1-15	77.6 (25.3)	87 (30.6)
June 16-30	87.0 (30.6)	
July	89.0 (31.7)	89 (31.7)
August	89.0 (31.7)	89 (31.7)
September 1-15	87.0 (30.6)	87 (30.7)
September 16-30	82.6 (28.1)	
October	75.5 (24.2)	78 (25.6)
November	66.1 (19.0)	70 (21.1)
December	56.7 (13.7)	57 (14.0)

[10] The permittee will have the option of either meeting the above limits at the end of pipe, or by meeting the limits with a mixed river temperature that takes into account the mixing zone allowed by 327 IAC 2-1-6(b). The mixed river temperature is to be determined by employing the following mathematical model:

$$TMR = TU + \frac{QE * (TE - TU)}{0.5 * (Q7{,}10 - QI) + QE}$$

where:
TMR = mixed river temperature (ºF)
TU = upstream river temperature (ºF)
TE = effluent temperature (ºF)
QE = effluent flow (MGD)
QI = intake flow (MGD)
Q7,10 = 5,920 MGD

[11] Temperature shall be monitored and measurements recorded every hour. The highest single recorded measurement for each day shall be reported on the state monthly monitoring report for each day. The highest single recorded daily measurement shall be reported on the federal discharge monitoring report as the maximum daily temperature for that month. The monthly average shall be reported on the state monthly monitoring and the federal discharge monitoring report as the average of all measured values for the calendar month.

[12] The permittee shall post a permanent marker on the stream bank at each outfall discharging directly to the Ohio River. The marker shall consist at a minimum of the name of the establishment to which the permit was issued, the permit number, and the outfall number. The information shall be printed in letters not less than two inches in height. The marker shall be a minimum of 2 feet by 2 feet and shall be a minimum of 3 feet above the ground.

[13] The Stormwater Monitoring and Non-Numeric Effluent Limits and the Stormwater Pollution Prevention Plan (SWPPP) requirements can be found in Part I.D. and I.E. of this permit.

[14] Continuous chlorination is considered as all occurrences that do not meet the definition of intermittent chlorination, as described in 327 IAC 2-1-6 Table 1, Footnote [a]. These water quality based effluent limits (WQBELs) are applicable any time that the discharge of chlorine does not meet this intermittent definition.

[15] This daily maximum limit for total residual chlorine is only applicable if the discharge of chlorine is intermittent. As required by 327 IAC 2-1-6 Table 1, Footnote [a], to be considered an intermittent discharge, total residual chlorine shall not be detected in the discharge for a period of more than forty (40) minutes in duration, and such periods shall be separated by at least five (5) hours. Simultaneous multi-unit chlorination is permitted.

[16] Beginning December 31, 2025, there shall be no discharge of bottom ash transport water from Unit 2. The discharge of bottom ash transport water from Unit 3 was prohibited as of December 31, 2020.

[17] There shall be no discharge of polychlorinated biphenyl (PCB) compounds attributable to facility operations such as those historically used in transformer fluids. In order to determine compliance with the PCB discharge prohibition, the permittee shall provide the following PCB data with the next NPDES permit renewal application for at least one sample taken from Outfall 001. The corresponding facility water intake(s) shall be monitored at the same time as the final outfall.

Parameter	Test Method	LOD	LOQ
*Total PCBs	608	0.1 µg/l	0.3 µg/l
*Total PCBs is the sum of the following aroclors: PCB-1016, PCB-1221, PCB-1232, PCB-1242, PCB-1248, PCB-1254, and PCB-1260.			

[18] Flow is to be measured continuously using a flow measuring device. The permittee may use engineering calculations to measure flow as approved by the commissioner.

[19] Chlorination reporting requirements for frequency and dose duration apply only when the facility is chlorinating intermittently.

[20] See Part I.F. of the permit for Whole Effluent Toxicity Testing requirements.

[21] The facility must submit a new comprehensive facility-wide water balance diagram with the next permit modification application or permit renewal application, whichever occurs first.

[22] The following conditions apply for Temperature outside the mixing zone:

(1) There shall be no abnormal temperature changes that may adversely affect aquatic life unless caused by natural conditions.
(2) The normal daily and seasonal temperature fluctuations that existed before the addition of heat due to other than natural causes shall be maintained.
(3) The maximum temperature rise at any time or place above natural shall not exceed five (5) degrees Fahrenheit (two and eight-tenths (2.8) degrees Celsius) in streams.

[23] The mixed river temperature shall be calculated each hour (or more frequently if temperature is recorded more frequently than hourly). The highest single calculated result for each day shall be reported on the state monthly monitoring report for each day. The highest single calculated daily result for a month shall be reported on the federal discharge monitoring report as the mixed river temperature maximum daily temperature for that month. The monthly average shall be reported on the state monthly monitoring and the federal discharge monitoring report as the average of all calculated daily maximums for the calendar month.

[24] This limit will become effective nine months after the effective date of the permit. Prior to the limit becoming effective, silver data shall be reported at a minimum of 2 X Monthly.

[25] The limit will become effective nine (9) months after the effective date of the permit. The limit is applicable at a location where public access is possible. The permittee must submit a report within six (6) months of the permit effective date that delineates in-river where public contact is possible and provides accompanying modeling and calculations that will be used to support reporting of temperatures at that location.

2. The permittee is authorized to discharge from the outfall listed below in accordance with the terms and conditions of this permit. The permittee is authorized to discharge from Outfall 101, located at Latitude 37° 54' 44.36", Longitude -87° 19' 50.81". The discharge is limited to contact stormwater pond discharge (low volume wastewater, coal pile run-off, treated metal cleaning wastewater from new internal outfall 401, bottom ash transport water filtrate (effective no later than May 1, 2023)[3], and stormwater). Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to mixing with any other wastestreams. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1][3][4]
Outfall 101

Table 1

	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
Parameter	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
Flow	Report	Report	MGD	----	----	----	1 X Daily	24-Hour Total
TSS[6]	----	----	----	18	58	mg/l	1 X Weekly	24 Hr. Comp.
O&G[6]	----	----	----	3[5]	3[5]	mg/l	1 X Weekly	Grab
COD	----	----	----	----	Report	mg/l	Semi-Annually	Grab
$CBOD_5$	----	----	----	----	Report	mg/l	Semi-Annually	Grab
Total Kjeldahl Nitrogen		----	----	----	Report	mg/l	Semi-Annually	Grab
Nitrate + Nitrite Nitrogen		----	----	----	Report	mg/l	Semi-Annually	Grab
Total Phosphorus		----	----	----	Report	mg/l	Semi-Annually	Grab

Table 2

	Quality or Concentration			Monitoring Requirements	
Parameter	Daily Minimum	Daily Maximum	Units	Measurement Frequency	Sample Type
pH[2]	6.0	9.0	s.u.	1 X Daily	Grab

[1] In the event that a new water treatment additive is to be used that will contribute to this Outfall, or changes are to be made in the use of water treatment additives, including dosage, the permittee must apply for and receive approval from IDEM prior to such discharge. Discharges of any such additives must meet Indiana water quality standards. The permittee must apply for permission to use water treatment additives by completing and submitting State Form 50000 (Application for Approval to Use Water Treatment Additives) currently available at: https://www.in.gov/idem/forms/idem-agency-forms/.

[2] If the permittee collects more than one grab sample on a given day for pH, the values shall not be averaged for reporting daily maximums or daily minimums. The permittee must report the individual minimum and the individual maximum pH value of any sample during the month on the Monthly Monitoring Report form.

[3] Fly ash and FGD wastewater are prohibited from being discharged to the Contact Stormwater Pond.

Bottom ash transport water from Unit 3 is prohibited from being discharged to the Contact Stormwater Pond.

Beginning December 31, 2025, bottom ash transport water from Unit 2 will be prohibited from being discharged to the Contact Stormwater Pond.

[4] Monitoring at Internal Outfall 101 is only required with the outfall is discharging to the discharge tunnel which leads to Outfall 001.

[5] The technology-based effluent limits (TBEL) for Oil & Grease are less than the limit of quantitation (LOQ) of 5 mg/l. Compliance with this permit will be demonstrated if the effluent concentrations measured are less than the LOQ.

[6] The TSS and O&G limits must be reevaluated during the next permit renewal. If the permittee wants TSS and/or O&G allocations for unregulated wastestreams, the following must be submitted with the next permit renewal application:

(a) Average flow rates for each regulated, unregulated and dilution wastestream before combining with a wastestream of a different category (regulated, unregulated and dilution),

(b) Beginning at least 24 months prior to the next permit renewal application due date, collect analytical data at least 1 x Month for the parameter contributed by each unregulated wastestream prior to combining with a wastestream of a different category for which the permittee wants an allocation, and

(c) Analytical data for the parameter for each wastestream which discharges directly to the Contact Stormwater Pond shall be collected prior to entering the Contact Stormwater Pond.

The permittee should submit a sampling plan to IDEM for review and approval prior to initiating the monitoring described above.

3. The permittee is authorized to discharge from the outfall listed below in accordance with the terms and conditions of this permit. The permittee is authorized to discharge from Outfall 201, located at Latitude 37° 54' 34.49", Longitude -87° 19' 27.59". The discharge is limited to East Ash Pond discharge effective no later than May 1, 2023. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to mixing with any other wastestreams. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1][3][4]
Outfall 201

Table 1

	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
Parameter	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
Flow	Report	Report	MGD	----	----	----	1 X Daily	24-Hour Total
O&G	----	----	----	15	20	mg/l	1 X Weekly	Grab
TSS	----	----	----	30	70	mg/l	1 X Weekly	24 Hr. Comp.

Table 2

	Quality or Concentration			Monitoring Requirements	
Parameter	Daily Minimum	Daily Maximum	Units	Measurement Frequency	Sample Type
pH[2]	6.0	9.0	s.u.	1 X Daily	Grab

[1] In the event that a new water treatment additive is to be used that will contribute to this Outfall, or changes are to be made in the use of water treatment additives, including dosage, the permittee must apply for and receive approval from IDEM prior to such discharge. Discharges of any such additives must meet Indiana water quality standards. The permittee must apply for permission to use water treatment additives by completing and submitting State Form 50000 (Application for Approval to Use Water Treatment Additives) currently available at: https://www.in.gov/idem/forms/idem-agency-forms/.

[2] If the permittee collects more than one grab sample on a given day for pH, the values shall not be averaged for reporting daily maximums or daily minimums. The permittee must report the individual minimum and the individual maximum pH value of any sample during the month on the Monthly Monitoring Report form.

[3] Monitoring at Internal Outfall 201 is only required with the outfall is discharging to the discharge tunnel which leads to Outfall 001.

[4] Bottom ash, fly ash, and FGD wastewater are prohibited from being discharged to the East Ash Pond.

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4. The permittee is authorized to discharge from the outfall listed below in accordance with the terms and conditions of this permit. The permittee is authorized to discharge from Outfall 401, located at Latitude 37° 54' 34.78", Longitude -87° 19' 28.98". The discharge is limited to metal cleaning wastewater. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to mixing with any other wastestreams. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1][3]
Outfall 401

Table 1

	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
Parameter	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
Flow	Report	Report	MGD	----	----	----	1 X Daily	24-Hour Total
O&G	----	----	----	15	20	mg/l	1 X Weekly	Grab
TSS	----	----	----	30	100	mg/l	1 X Weekly	24 Hr. Comp.
Copper[4]	----	----	----	1.0	1.0	mg/l	1 X Daily	24 Hr. Comp.
Iron[4]	----	----	----	1.0	1.0	mg/l	1 X Daily	24 Hr. Comp.

Table 2

	Quality or Concentration			Monitoring Requirements	
Parameter	Daily Minimum	Daily Maximum	Units	Measurement Frequency	Sample Type
pH[2]	6.0	9.0	s.u.	1 X Daily	Grab

[1] In the event that a new water treatment additive is to be used that will contribute to this Outfall, or changes are to be made in the use of water treatment additives, including dosage, the permittee must apply for and receive approval from IDEM prior to such discharge. Discharges of any such additives must meet Indiana water quality standards. The permittee must apply for permission to use water treatment additives by completing and submitting State Form 50000 (Application for Approval to Use Water Treatment Additives) currently available at: https://www.in.gov/idem/forms/idem-agency-forms/.

[2] If the permittee collects more than one grab sample on a given day for pH, the values shall not be averaged for reporting daily maximums or daily minimums. The permittee must report the individual minimum and the individual maximum pH value of any sample during the month on the Monthly Monitoring Report form.

[3] Monitoring at Internal Outfall 401 is only required when metal cleaning wastewater is being discharged to a yard drain or other conveyance that eventually discharges to the Ohio River. Samples should be collected after treatment, if any, and prior to entering a yard drain or other conveyance.

[4] The permittee shall measure and report the identified metal as total recoverable metal.

5. The permittee is authorized to discharge from the outfall listed below in accordance with the terms and conditions of this permit. The permittee is authorized to discharge from Outfall 004, located at Latitude 37° 54' 38.36", Longitude -87° 19' 35.09". The discharge is limited to sanitary wastewater package plant discharge. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to entry into the Ohio River. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1][2][4]
Outfall 004

Table 1

	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
Parameter	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
Flow	Report	Report	MGD	----	----	----	2 X Monthly	24-Hour Total
TSS	----	----	----	30	45	mg/l	2 X Monthly	24 Hr. Comp.
$TBOD_5$	----	----	----	30	45	mg/l	2 X Monthly	24 Hr. Comp.
E. coli[5]	----	----	----	125[6]	235[7]	count/100 ml	2 X Monthly	Grab
Fecal Coliform[8][9]								
Interim	----	----	----	Report	----	count/100 ml	2 X Monthly	Grab
Final	----	----	----	2000	----	count/100 ml	2 X Monthly	Grab

Table 2

	Quality or Concentration			Monitoring Requirements	
Parameter	Daily Minimum	Daily Maximum	Units	Measurement Frequency	Sample Type
pH[3]	6.0	9.0	s.u.	2 X Monthly	Grab

[1] See Part I.B. of the permit for the minimum narrative limitations.

[2] In the event that a new water treatment additive is to be used that will contribute to this Outfall, or changes are to be made in the use of water treatment additives, including dosage, the permittee must apply for and receive approval from IDEM prior to such discharge. Discharges of any such additives must meet Indiana water quality standards. The permittee must apply for permission to use water treatment additives by completing and submitting State Form 50000 (Application for Approval to Use Water Treatment Additives) currently available at: https://www.in.gov/idem/forms/idem-agency-forms/.

[3] If the permittee collects more than one grab sample on a given day for pH, the values shall not be averaged for reporting daily maximums or daily minimums. The permittee must report the individual minimum and the individual maximum pH value of any sample during the month on the Monthly Monitoring Report form.

[4] The permittee shall post a permanent marker on the stream bank at each outfall discharging directly to the Ohio River. The marker shall consist at a minimum of the name of the establishment to which the permit was issued, the permit number, and the outfall number. The information shall be printed in letters not less than two inches in height. The marker shall be a minimum of 2 feet by 2 feet and shall be a minimum of 3 feet above the ground.

[5] The limits and monitoring requirements for *E. coli* apply from April 1 through October 31. The effluent shall be disinfected on a continuous basis such that violations of the applicable bacteriological limitations do not occur from April 1 through October 31 annually.

[6] The monthly average *E. coli* value shall be calculated as a geometric mean. Per 327 IAC 5-10-6, the concentration of *E. coli* shall not exceed one hundred twenty-five (125) cfu or mpn per 100 milliliters as a geometric mean of the effluent samples taken in a calendar month. No samples may be excluded when calculating the monthly geometric mean.

[7] If less than ten samples are taken and analyzed for *E. coli* in a calendar month, no samples may exceed two hundred thirty-five (235) cfu or mpn as a daily maximum. However, when ten (10) or more samples are taken and analyzed for *E. coli* in a calendar month, not more than ten percent (10%) of those samples may exceed two hundred thirty-five (235) cfu or mpn as a daily maximum. When calculating ten percent, the result must not be rounded up. In reporting for compliance purposes on the Discharge Monitoring Report (DMR) form, the permittee shall record the highest non-excluded value for the daily maximum.

[8] In order to comply with ORSANCO requirements, in accordance with 327 IAC 5-10-6(b), fecal coliform is limited to a monthly average of 2,000 count per 100 ml from November 1 through March 31. The monthly average for fecal coliform shall be calculated using a geometric mean.

[9] This limit will become effective nine months after the effective date of the permit. Prior to the limit becoming effective, Fecal coliform results shall be reported as a geometric mean from November 1 through March 31.

6. The permittee is authorized to discharge stormwater from the outfall listed below in accordance with the terms and conditions of this permit. The permittee is authorized to discharge from Outfall 005, located at Latitude 37° 54' 42.40", Longitude -87° 19' 51.49". Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the discharge but prior to entry into the Ohio River. Such discharge shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS [1][2][4][5]

Outfall 005

			Monitoring Requirements	
Parameter	Daily Maximum	Units	Measurement Frequency[3]	Sample Type
Flow	Report	MGD	Semi-Annually	Estimate Total
Total Suspended Solids	Report	mg/l	Semi-Annually	Grab
pH	Report	s.u.	Semi-Annually	Grab
O&G	Report	mg/l	Semi-Annually	Grab
COD	Report	mg/l	Semi-Annually	Grab
$CBOD_5$	Report	mg/l	Semi-Annually	Grab
Total Kjeldahl Nitrogen	Report	mg/l	Semi-Annually	Grab
Nitrate plus Nitrite Nitrogen	Report	mg/l	Semi-Annually	Grab
Total Phosphorus	Report	mg/l	Semi-Annually	Grab

[1] The Stormwater Monitoring and Non-Numeric Effluent Limits and the Stormwater Pollution Prevention Plan (SWPPP) requirements can be found in Part I.D. and I.E. of this permit.

[2] All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches and at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. There shall be a minimum of three (3) months between reported sampling events.

For each sample taken, the permittee shall record the duration and total rainfall of the storm event, the number of hours between beginning of the storm measured and the end of the previous measurable rain event, and the outside temperature at the time of sampling. A grab sample shall be taken during the first thirty (30) minutes of the discharge (or as soon thereafter as practicable).

[3] The first sampling event is to occur between January and June and the associated DMR / MMR submitted no later than July 28th. The second sampling event is to occur between July and December and the associated DMR / MMR submitted no later than January 28th.

[4] See Part I.B. of the permit for the minimum narrative limitations.

[5] The permittee shall post a permanent marker on the stream bank at each outfall discharging directly to the Ohio River. The marker shall consist at a minimum of the name of the establishment to which the permit was issued, the permit number, and the outfall number. The information shall be printed in letters not less than two inches in height. The marker shall be a minimum of 2 feet by 2 feet and shall be a minimum of 3 feet above the ground.

7. The permittee is required to collect intake water samples in conjunction with certain discharge samples. The intake structure is designated as 000 on the Discharge Monitoring Report (DMR) forms. Samples taken in compliance with the monitoring requirements below shall be taken at a point representative of the intake water characteristics. Such samples shall be monitored by the permittee as specified below:

DISCHARGE LIMITATIONS

Intake Structures 000

Table 1

	Quantity or Loading			Quality or Concentration			Monitoring Requirements	
Parameter	Monthly Average	Daily Maximum	Units	Monthly Average	Daily Maximum	Units	Measurement Frequency	Sample Type
Flow Intake 1[3]	Report	Report	MGD	----	----	----	1 X Daily	24-Hour Total
Flow Intake 2[3]	Report	Report	MGD	----	----	----	1 X Daily	24-Hour Total
Flow Intake 3[3]	Report	Report	MGD	----	----	----	1 X Daily	24-Hour Total
Mercury[1][2]	----	----	----	Report	Report	ng/l	1 X Monthly	Grab
Arsenic[2]	----	----	----	Report	Report	mg/l	1 X Monthly	24 Hr. Comp.
Cadmium[1]	----	----	----	Report	Report	ug/l	1 X Monthly	24 Hr. Comp.
Selenium[1][2]	----	----	----	Report	Report	mg/l	1 X Monthly	24 Hr. Comp.
Nickel[1]	----	----	----	Report	Report	mg/l	1 X Monthly	24 Hr. Comp.
Aluminum[1]	----	----	----	Report	Report	mg/l	1 X Monthly	24 Hr. Comp.
Silver[1][2]	----	----	----	Report	Report	ug/l	1 X Monthly	24 Hr. Comp.
Zinc[1]	----	----	----	Report	Report	mg/l	1 X Monthly	24 Hr. Comp.
Copper[1]	----	----	----	Report	Report	ug/l	1 X Monthly	24 Hr. Comp.
Iron[1]	----	----	----	Report	Report	mg/l	1 X Monthly	24 Hr. Comp.

[1] The permittee shall measure and report the identified metal as total recoverable metal.

[2] The following EPA approved test methods and associated LODs and LOQs are to be used in the analysis of the effluent samples. Alternative methods may be used if first approved by IDEM and EPA, if applicable.

Parameter	Test Method	LOD	LOQ
Mercury	1631E	0.2 ng/l	0.5 ng/l
Arsenic	3113 B-2004	1 µg/l	3.2 µg/l
Arsenic	200.9, Rev. 2.2 (1994)	0.5 µg/l	1.6 µg/l
Arsenic	200.8, Rev. 5.4 (1994)	0.4 µg/l	1.3 µg/l
Selenium	3113 B-2004 or 3114 B-2009	2 µg/l	6.4 µg/l
Selenium	200.8, Rev. 5.4 (1994)	2.1 µg/l	6.7 µg/l
Selenium	200.9, Rev. 2.2 (1994)	0.6 µg/l	1.9 µg/l
Silver	200.8, Rev 5.4 (1994) Selection Ion Monitoring	0.005 µg/l	0.016 µg/l

Case-Specific LOD/LOQ

The permittee may determine and use a case-specific LOD or LOQ using the analytical method specified above, or any other analytical method which is approved by the Commissioner, and EPA if applicable, prior to use. The LOD shall be derived by the procedure specified for method detection limits contained in 40 CFR Part 136, Appendix B, and the LOQ shall be set equal to 3.18 times the LOD. Other methods may be used if first approved by the Commissioner.

[3] The permittee shall report 24-hour total intake flow as an estimated flow using pump hours of operation. Within 24 months of the effective date of the permit, the permittee shall report the 24-hour total intake flow as measured from a flow meter or other IDEM approved methodology.

National Pollutant Discharge Elimination System
Fact Sheet for

SIGECO F.B. Culley Generating Station

Draft modification: April 2023
Final modification: TBD

Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

Permittee:	Southern Indiana Gas and Electric Company (SIGECO) d/b/a CenterPoint Energy Indiana South (CEIS) P.O. Box 209 Evansville, IN 47702
Existing Permit Information:	Permit Number: IN0002259 Expiration Date: February 29, 2028
Facility Contact:	Angela Casbon-Scheller, Manager, Environmental Operations (812) 491-4787 Angela.Casbon-Scheller@centerpointenergy.com
Facility Location:	F.B. Culley Generating Station 3711 Darlington Road Newburgh, IN 47630 Warrick County
Receiving Stream:	Ohio River
GLI/Non-GLI:	Non-GLI
Proposed Permit Action:	Modify
Date Application Received:	March 21, 2023
Source Category	NPDES Major – Industrial
Permit Writer:	Nikki Gardner, Technical Environmental Specialist (317) 232-8707; ngardner@idem.in.gov

Table of Contents

1.0 INTRODUCTION

The Indiana Department of Environmental Management (IDEM) received a request from the permittee on March 21, 2023, to modify National Pollutant Discharge Elimination System (NPDES) Permit IN0002259. The current five-year permit was issued with an effective date of March 1, 2023, in accordance with 327 IAC 5-2-6(a).

The Federal Water Pollution Control Act (more commonly known as the Clean Water Act), as amended, (Title 33 of the United States Code (U.S.C.) Section 1251 et seq.), requires an NPDES permit for the discharge of pollutants into surface waters. Furthermore, Indiana law requires a permit to control or limit the discharge of any contaminants into state waters or into a publicly owned treatment works. This proposed permit action by IDEM complies with and implements these federal and state requirements.

In accordance with Title 40 of the Code of Federal Regulations (CFR) Sections 124.8 and 124.56, as well as Title 327 of the Indiana Administrative Code (IAC) Article 5-3-8, a Fact Sheet is required for certain NPDES permits. This document fulfills the requirements established in these regulations. This Fact Sheet was prepared in order to document the factors considered in the development of NPDES Permit effluent limitations. The technical basis for the Fact Sheet may consist of evaluations of promulgated effluent guidelines, existing effluent quality, receiving water conditions, Indiana water quality standards-based wasteload allocations, and other information available to IDEM. Decisions to award variances to Water Quality Standards or promulgated effluent guidelines are justified in the Fact Sheet where necessary. This Fact Sheet also identifies the modified pages of the permit as issued on February 1, 2023.

2.0 FACILITY DESCRIPTION

2.1 General

The SIGECO F.B. Culley Generating Station is classified under Standard Industrial Classification (SIC) Code 4911 - Electric Services.

The facility is a coal-fired steam electric generating plant with two (2) generating units; Unit 2 (100 MW) and Unit 3 (270 MW). The permittee has proposed to retire Unit 2 by the end of 2025. The Ohio River accounts for approximately 99% of the facility's intake water with groundwater accounting for the remainder. The design intake volume is 360 MGD and the design discharge volume is 360 MGD. The average daily intake for 2020 was 160 MGD and average discharge volume was 161.8 MGD.

A map showing the location of the facility has been included as Figure 1.

Figure 1: Facility Location/Site Map

3711 Darlington Road
Newburgh, IN 47630
Warrick County

2.2 Outfall Locations

Outfall 001	Latitude	37º 54’ 35.39”
	Longitude	-87º 19’ 37.99”
Outfall 101	Latitude	37º 54’ 44.36”
	Longitude	-87º 19’ 50.81”
Outfall 201	Latitude	37º 54’ 34.49”
	Longitude	-87º 19’ 27.59”
Outfall 301	Removed as part of this permit modification.	
Outfall 401	Latitude	37º 54’ 34.78”
	Longitude	-87º 19’ 28.98”
Outfall 004	Latitude	37º 54’ 38.36”
	Longitude	-87º 19’ 35.09”
Outfall 005	Latitude	37º 54’ 42.40”
	Longitude	-87º 19’ 51.49”

3.0 PERMIT MODIFICATION

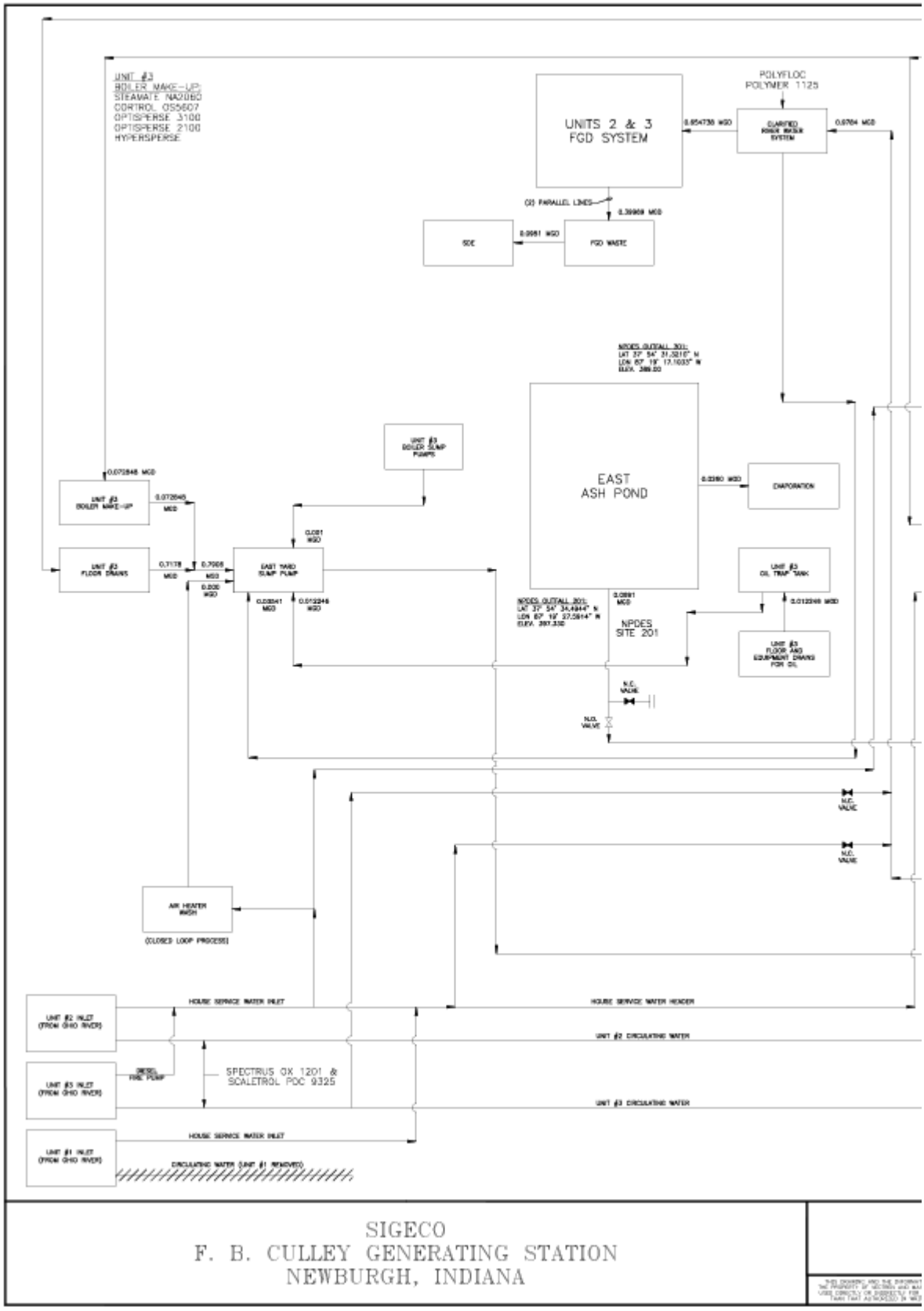
3.1 Modification Request

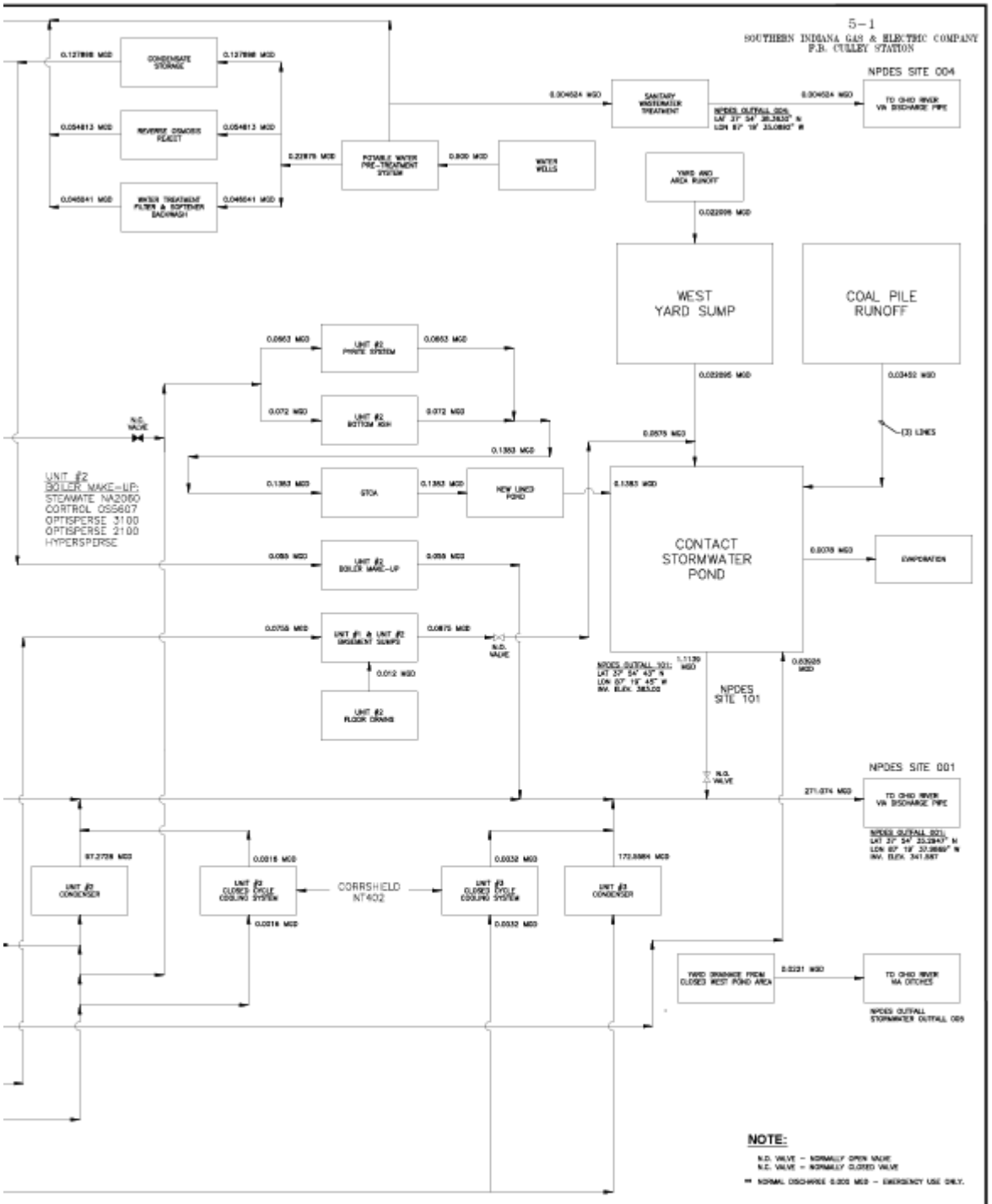
Southern Indiana Gas and Electric Company (SIGECO) is requesting permit language modifications for activities and changes related to the re-routing of Bottom Ash Transport Water (BATW) from the East Ash Pond (internal Outfall 201) to a new Geotube Containment Area (GTCA) and New Lined Pond, which are bring constructed to comply with the Coal Combustion Residuals (CCR) Part A Final Rule. The BATW will be routed to the GTCA where the water will be treated with polymer to facilitate the collection of solids in the geotubes, prior to the water entering the New Lined Pond. The water will then be routed from the New Lined Pond to the existing Contact Stormwater Pond (internal Outfall 101).

Internal Outfall 201 will continue to consist of discharge from the East Ash Pond. The flows to the East Ash Pond will be reduced to only the existing water as the pond is dewatered for the purpose of closure-by-removal.

The FGD wastewater (internal Outfall 301) that has been routed through the chemical-precipitation system mix tanks and to the East Ash Pond for the sedimentation step of the treatment process, will no longer discharge to the East Ash Pond once the Spray Dryer Evaporator is online, which is scheduled for no later than May 1, 2023. At that time, internal Outfall 301 will cease to exist. A Water Balance Diagram is included as Figure 2.

Figure 2: Water Balance Diagram




5-1
SOUTHERN INDIANA GAS & ELECTRIC COMPANY
F.B. CULLEY STATION
NPDES SITE 004
CONDENSATE STORAGE
REVERSE OSMOSIS REJECT
WATER TREATMENT FILTER & SOFTENER BACKWASH
POTABLE WATER PRE-TREATMENT SYSTEM
WATER WELLS
SANITARY WASTEWATER TREATMENT
TO OHIO RIVER VIA DISCHARGE PIPE
NPDES OUTFALL 004:
LAT 37° 54' 38.3830" N
LON 87° 19' 33.0890" W
YARD AND AREA RUNOFF
WEST YARD SUMP
COAL PILE RUNOFF
(3) LINES
UNIT #2 PRINTE SYSTEM
UNIT #2 BOTTOM ASH
N.C. VALVE
UNIT #2 BOILER MAKE-UP: STEAMATE NA2060 CORTROL OSS607 OPTISPERSE 3100 OPTISPERSE 2100 HYPERSPERSE
STOA
NEW LINED POND
CONTACT STORMWATER POND
EVAPORATION
UNIT #2 BOILER MAKE-UP
UNIT #1 & UNIT #2 BASEMENT SUMPS
N.O. VALVE
UNIT #2 FLOOR DRAINS
NPDES OUTFALL 101:
LAT 37° 54' 43" N
LON 87° 19' 45" W
INV. ELEV. 383.00
NPDES SITE 101
N.O. VALVE
NPDES SITE 001
TO OHIO RIVER VIA DISCHARGE PIPE
NPDES OUTFALL 001:
LAT 37° 54' 33.3947" N
LON 87° 19' 37.9869" W
INV. ELEV. 341.667
UNIT #2 CONDENSER
UNIT #2 CLOSED CYCLE COOLING SYSTEM
CORRSHIELD NT402
UNIT #3 CLOSED CYCLE COOLING SYSTEM
UNIT #3 CONDENSER
THIRD DRAINAGE FROM CLOSED WEST POND AREA
TO OHIO RIVER VIA DITCHES
NPDES OUTFALL STORMWATER OUTFALL 005
NOTE:
N.O. VALVE - NORMALLY OPEN VALVE
N.C. VALVE - NORMALLY CLOSED VALVE
** NORMAL DISCHARGE 0.205 MGD - EMERGENCY USE ONLY.
PLANT WATER BALANCE
THREE i DESIGN
ENGINEERING + ARCHITECTURE
DRAWN BY: JM.R.
CHK. BY: JM.R.
DATE: 10-11-11
SCALE: NONE
DRAWING NO: F-3025.3

3.2 IDEM's Proposed Modification

The requested permit modification is approved. The following changes have been made:

- Updated outfall descriptions are provided below and on pages 2, 9, 11, 12, and 13 of the Permit.
- Permit Parts I.A.5. - I.A.8. (pages 14, 15, 17, and 19) have been renumbered due to the removal of Outfall 301 (previously Permit Part I.A.4.).
- The building block limits applied at internal Outfall 101 have been recalculated to account for the addition of the bottom ash transport water (see below and Permit Part I.A.2.). Only TSS and O&G limits are affected by the new wastestream.
- Changes in operation are described below.

Outfall 001:

Final Outfall 001 discharges to the Ohio River near river mile 773. According to the renewal application, the long-term average flow from the outfall is 181.6 MGD. Based on data obtained from EPA ECHO, the design flow (highest monthly average) based on the most recent 2 years of data is 297 MGD. Treatment of the condenser cooling water includes the use of chlorine and bromine. Operations contributing to the flow include:

- Two (2) Condenser Cooling units (178.3 MGD). Includes Unit #2 and Unit #3.
- Unit #2 Boiler Make-Up Water (source of the make-up water is the condensate storage.)
- Contact Stormwater Pond discharge (0.93 MGD). See Outfall 101 description below.
- Ash pond discharge (2.4 MGD). See Outfall 201 description below.
- Treated metal cleaning wastewater (0.05 – 0.07 MGD). See Outfall 401 below.

Outfall 101:

Internal Outfall 101 is the discharge from the Contact Stormwater Pond. The long-term average flow provided in the renewal application is 0.93 MGD. Based on data obtained from EPA ECHO, the design flow (highest monthly average) based on the most recent 2 years of data is 3.3 MGD. Flow from Outfall 101 ultimately discharges through Outfall 001. Treatment of the contact stormwater pond water consists of sedimentation. The Contact Stormwater Pond receives water from:

- Coal pile run-off.
- West yard sump. Includes Unit #1 basement sump & Unit #2 basement sump (which includes the Unit #2 floor drains).
- East side yard sump. Includes Unit #3 Oil Trap Tank, floor drains, greensand water treatment filters regenerant and backwash, softener regenerant streams, RO rejects, Unit #3 Boiler make-up (source is condensate storage), Unit #3 boiler sump pumps, air heater & boiler washes, clarified river water system backwash, and potable water pre-treatment system.
- Metal cleaning wastewater. See Outfall 401 below.
- Bottom ash transport water (BATW) filtrate from the new lined pond.

Outfall 201:

Internal Outfall 201 consists of discharge from the East Ash Pond. The long-term average flow provided in the renewal application is 2.4 MGD. Based on data obtained from EPA ECHO, the design flow (highest monthly average) based on the most recent 2 years of data is 4.6 MGD. Outfall 201 combines with other plant waters and discharges through Outfall 001. Treatment of the ash pond water consists of sedimentation. Discharge from the East Ash Pond will consist only of existing water as the pond is dewatered for the purpose of closure-by-removal.

Outfall 301:

Removed. This wastestream will cease to exist by May 1, 2023.

Changes in Operation

CCR flows to the East Ash Pond will cease by a date not to exceed May 1, 2023. The Bottoms Ash Transport Water will be re-routed to the Geotube Containment Area (GTCA) with the filtrate routed to the New Lined Pond, which discharges to Outfall 001 via internal Outfall 101. The GTCA and New Lined Pond were constructed within the footprint of the closed West Ash Pond to the north the of the lined Contact Stormwater Pond. The FGD Wastewater is routed to the Zero Liquid Discharge (ZLD) equipment which has in-service timing on schedule to be complete by May 1, 2023.

Effluent Limitations and Monitoring Requirements by Outfall

Outfall 101: Contact Stormwater Pond Discharge (low volume wastewater, coal pile run-off, treated metal cleaning wastewater (new internal Outfall 401) bottom ash transport water filtrate, and stormwater)

TOTAL SUSPENDED SOLIDS	Flow (MGD)	Average	Max	Average	Max	Status
Coal Pile Runoff	0.03452	30	30	1.0356	1.0356	Reg
West Yard Sump	0.022095	30	100	0.66285	2.2095	Unreg
RO Sump	0.09216	0	0	0	0	Dilution
Unit 1 & 2 Basement Sumps	0.0875	30	100	2.625	8.75	Reg
East Yard Sump	0.084109	30	100	2.52327	8.4109	Reg + Unreg
Potable water pretreatment system	0.26663	30	100	7.9989	26.663	Unreg (may be dilution)
Water treatment filter & softener backwash	0.046041	30	100	1.38123	4.6041	Unreg (may be dilution)
Bottom ash transport water	**0.1383**	**30**	**100**	**4.149**	**13.83**	**Reg**
Air Compressor Cooling	0.35032	0	0	0	0	Dilution
TOTAL	1.121675			20	65.5031	
Limits at Outfall 101				18	58	

OIL AND GREASE	Flow (MGD)	Average	Max	Average	Max	Status
Coal Pile Runoff	0.03452	0	0	0	0	Dilution
West Yard Sump	0.022095	15	20	0.331425	0.4419	Unreg
RO Sump	0.09216	0	0	0	0	Dilution
Unit 1 & 2 Basement Sumps	0.0875	15	20	1.3125	1.75	Reg
East Yard Sump	0.084109	15	20	1.261635	1.68218	Reg + Unreg
Potable water pretreatment system	0.26663	0	0	0	0	Unreg (may be dilution)
Water Treatment filter & softener backwash	0.046041	0	0	0	0	Unreg (may be dilution)
Bottom ash transport water	**0.1383**	**15**	**20**	**2.0745**	**2.766**	**Reg**
Air Compressor Cooling	0.35032	0	0	0	0	Dilution
TOTAL	1.121675			2.90556	3.87408	
Limits at Outfall 101				3	3	

3.3 Antibacksliding

The limitations in the permit for TSS at internal outfall 101 are less stringent than the comparable limitations for those parameters in the previous permit. Under 327 IAC 5-2-10(a)(11)(B)(i), these less stringent limitations do not violate the antibacksliding requirements since material and substantial alterations or additions to the permitted facility occurred after permit issuance that justify the application of a less stringent effluent limitation.

3.4 Antidegradation

Indiana's Antidegradation Standards and Implementation procedures are outlined in 327 IAC 2-1.3. The antidegradation standards established by 327 IAC 2-1.3-3 apply to all surface waters of the state. The permittee is prohibited from undertaking any deliberate action that would result in a new or increased discharge of a bioaccumulative chemical of concern (BCC) or a new or increased permit limit for a regulated pollutant that is not a BCC unless information is submitted to the commissioner demonstrating that the proposed new or increased discharge will not cause a significant lowering of water quality, or an antidegradation demonstration submitted and approved in accordance 327 IAC 2-1.3-5 and 2-1.3-6.

The new or increased loading of TSS at internal Outfall 101 does not result in a significant lowering of water quality as defined in 327 IAC 2-1.3-2(50).

3.5 Spill Response and Reporting Requirement

Reporting requirements associated with the Spill Reporting, Containment, and Response requirements of 327 IAC 2-6.1 are included in Part II.B.2.(d), Part II.B.3.(c), and Part II.C.3. of the NPDES permit. Spills from the permitted facility meeting the definition of a spill under 327 IAC 2-6.1-4(15), the applicability requirements of 327 IAC 2-6.1-1, and the Reportable Spills requirements of 327 IAC 2-6.1-5 (other than those meeting an exclusion under 327 IAC 2-6.1-3 or the criteria outlined below) are subject to the Reporting Responsibilities of 327 IAC 2-6.1-7.

It should be noted that the reporting requirements of 327 IAC 2-6.1 do not apply to those discharges or exceedances that are under the jurisdiction of an applicable permit when the substance in question is covered by the permit and death or acute injury or illness to animals or humans does not occur. In order for a discharge or exceedance to be under the jurisdiction of this NPDES permit, the substance in question (a) must have been discharged in the normal course of operation from an outfall listed in this permit, and (b) must have been discharged from an outfall for which the permittee has authorization to discharge that substance.

3.6 Permit Processing/Public Comment

Pursuant to IC 13-15-5-1, IDEM will publish the draft permit document online at https://www.in.gov/idem/public-notices/. Additional information on public participation can be found in the "Citizens' Guide to IDEM", available at https://www.in.gov/idem/resources/citizens-guide-to-idem/. A 30-day comment period is available to solicit input from interested parties, including the public.